

CHAPTER OVERVIEW

17: Chemical Kinetics and Dynamics

The chapters in this section deal with the rates and mechanisms of chemical change. These topics stand in contrast to the subjects of **equilibrium** and **thermodynamics** that control the *direction* of chemical change. Chemical change is guided and driven by energetics (thermodynamics), but the actual route it takes and the speed with which it occurs is the subject of "dynamics". Dynamics is itself divided into two general areas: kinetics, which deals with the rate of change and is the subject of this lesson. Mechanistics, introduced in a later lesson, is an exploration of the "road map" that links reactants to products.

[17.1: Rates of reactions and rate laws](#)

[17.2: Reaction Rates Typically Change with Time](#)

[17.3: Collision and activation- the Arrhenius law](#)

[17.4: Reaction Mechanisms](#)

[17.5: Kinetics of Reactions in Solution](#)

[17.6: Catalysts and Catalysis](#)

[17.7: Experimental methods of chemical kinetics](#)

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